

Remarks

In the office action, claims 1-50 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. patent 5,805,868 ("Murphy"). The rejections were issued erroneously and should be withdrawn.

In the context of fast clear, Murphy discloses nothing more than the well-known "striping" technique that is described in Applicant's own specification and acknowledged therein as conventional:

Any conventional fast clear technique, such as a striping technique, may be utilized to handle clear commands for region 800. In accordance with a striping technique, region 800 may be divided into stripes 802. Alternatively, region 800 may be divided into vertical columns, or region 800 may be further divided into a matrix of rectangles. (The terms "subdivisions" and "stripes" and "striping" are used interchangeably herein to refer to any and all of these alternative stripes, columns or rectangles.) Responsive to each clear command, the current clear count for region 800 may be incremented, and then an actual clear may be performed in one of stripes 802. The one stripe 802 chosen for actual clearing may change according to a cyclic schedule so that all of stripes 802 will have been actually cleared at the completion of the cycle. The benefit of the striping technique is that an actual full clear of the entire striped area need not be performed in response to any one clear command, provided the number of stripes in the region is not greater than the maximum value of the current clear count register for the region; instead, the full clear is amortized over several clear commands.

Application at page 12, lines 8-22. Compare the above with Murphy's disclosure:

The fast clear mechanism provides a method where the cost of clearing the depth and stencil buffers can be amortized over a number of clear operations issued by the application. This works as follows:

The window is divided up into n regions, where n is the range of the frame counter (16 or 256). Every time the application issues a clear command the reference frame counter is incremented ... and the n th region is cleared only. The clear updates the depth and/or stencil buffers to the new values and the frame count buffer with the reference value. This region is much smaller than the full window and hence takes less time to clear.

Murphy at col. 25, lines 21-33.

Applicant does not claim to have invented striping. While Applicant's invention may be employed in conjunction with striping, striping does not anticipate Applicant's invention as claimed.

Claims 1, 15, 31, 47, 48 and 50. For example, claims 1, 15, 31, 47, 48 and 50 all require performing an initialization routine responsive to a first clear command, wherein the initialization routine comprises "eliminating stale information from *all pixels outside the subregion*;" and, responsive to a subsequent clear command: updating a current clear count for the region; and "writing the updated current clear count into clear count values associated with *all pixels outside the subregion*."

The striping technique of Murphy, by way of contrast, specifically teaches *not* to eliminate stale information from pixels outside the i th region. Instead, it requires that *only* the i th region be actually cleared, not all pixels outside the i th region. Murphy at col. 55, line 15. Indeed, if all pixels outside the i th region were cleared, then the technique of Murphy would fail of its essential purpose and would thus be rendered inoperative.

Dependent claims. The PTO comments regarding Applicant's dependent claims also appear to mischaracterize or misperceive the Murphy disclosure. The Murphy disclosure is written as an omnibus specification wherein numerous separate inventions are disclosed under separate headings in the context of describing numerous separate functional blocks in a semiconductor chip (the "GLINT 300SX"). See Murphy at col. 5, line 66 to col. 6, line 3. Not surprisingly, in a 62-column omnibus description such as this one, one might find the appearance of words such as "scissor" (Murphy at col. 9, lines 52-61), "strip" (Murphy at col. 26, line 50), and "percentage" (Murphy at col. 48, line 12). But merely citing the isolated appearance of such words does not establish anticipation according to the standard required by 35 U.S.C. 102(b).


For example, the cited appearance of the word "scissor" in Murphy is simply a paragraph describing in general terms the scissor and stiple unit of the GLINT 300SX graphics chip. The cited appearance of the word "percentage" is actually in the context of describing alpha blending--a known technique wherein an existing color value may be blended with, rather than replaced by, a new pixel value. And the appearance of the word "strip" actually is in the context of describing a limitation of the GLINT 300SX: It only supports a discrete number of screen widths. Therefore, the difference between an arbitrary width bitmap and the closest one of the supported screen widths will be "an unused strip of pixels down the right hand side of the bitmap." Murphy at col. 26, lines 50-51.

Applicant has not been able to determine how the cited occurrences of these words and others serve to anticipate the novel features recited in the dependent claims as filed. If further discussions are to be necessary on these points, Applicant suggests a telephone interview might be constructive. But for the record, Applicant does not accede to the PTO's characterizations of Murphy with respect to the dependent or independent claims, and reserves the right to point out other salient distinctions and arguments with respect to all claims if it should become necessary to do so.

Conclusion

Applicant respectfully asserts that each of claims 1-50 patentably distinguishes over the prior art of record. Therefore, Applicant requests withdrawal of the rejections under 35 U.S.C. § 102(b) and allowance of claims 1-50.

Respectfully submitted,



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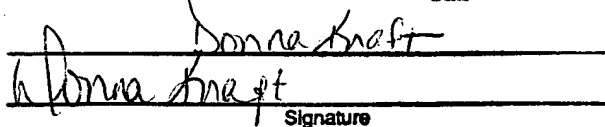
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